REMARKS

The Specification was amended to correct a reference to Code Division Multiple Access (CDMA) for wireless communication.

We turn now to the rejection of claims 1-16 under §103 as being unpatentable over Rosser, U.S. Patent 6,446,261, in view of Khoo et al, U.S. Patent 6,434,747. We cannot agree with the Examiner's rejection on this basis.

Briefly, the claimed invention provides a system and method for targeting content to network devices over a data network. The system includes a profile store that stores user profile information for network devices, a content store for storing content, and a system manager for downloading content from the content store to targeted network devices based on user profile information for the network devices and group profile information to which the content is targeted. In particular, the system manager sends messages to targeted network devices among other devices on the data network instructing system agents on the targeted network devices on when and which content to download.

Turning attention to the prior art of record, Rosser discloses a set top device for anonymous targeted electronic insertion of content into live video. In particular, Rosser broadcasts content for insertion to all set top devices along with a requested viewer usage profile. However, only devices whose locally maintained viewer usage profile match the requested profile display the content to the viewer.

Rosser only teaches one to broadcast content over a video network. However, Rosser suggests that content may be broadcast over a data network. When content is broadcast over a data network, highly inefficient usage of the network bandwidth results. This is because Rosser only suggests that all content be sent to all set top devices, whether or not the content is targeted for them.

Further, this will result in a significant amount of set top device memory being consumed, if such memory is available or not. The volume of content that can be broadcast to all set tops will be severely limited. In addition, a system that broadcasts all content to all devices without regard to available bandwidth at the time of the broadcast on the network is inefficient on a large scale. Rosser will not easily scale to a network having a large population of devices.

In contrast, embodiments of the present invention manage the bandwidth of a data network more efficiently by sending messages to targeted network devices among other network devices based on user profile information of the network devices and group profile information to which the content is targeted. The messages instruct the network device on when and which content to download. Thus, content is downloaded over a data network only to targeted network devices rather than to all devices. Such embodiments also allow for more efficient usage of limited memory resources in set top devices.

Claims 1 and 10 have been amended to include this feature. Support for this feature may be found at least in Figure 4A and in the specification as originally filed on page 21, line 10 through page 23, line 12.

Khoo et al also does not teach this feature of effectively managing the bandwidth of a data network by sending messages to targeted network devices instructing the network device on when and which content to download. Rather, Khoo et al discloses transmitting customized content over a video network as opposed to a data network. - fig 2 - D. Not. 230

Further, Khoo et al is similar to a video-on-demand system in that television programming and commercials are transmitted over a video network according to a customized media list generated for a viewer in response to requests from the set top devices. In particular, custom video streams are transmitted to each individual set top device. Such a system would not effectively manage the bandwidth of a video network, particularly at peak times when all set top devices initiate their requests at the same time.

In contrast, the claimed invention sends messages to targeted network devices among other network devices based on user profile information of the network devices and group profile information to which the content is targeted. The messages instruct the network device as to when and as to which content to download. No such feature is taught or suggested by Rosser or Khoo. Claims 1 and 10 should now be allowed.

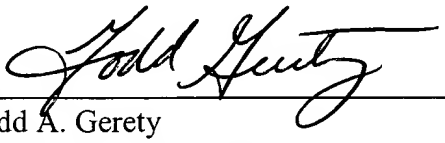
Since all other claims depend from claim 1 or 10, they, too, should be in condition for allowance.

CONCLUSION

In view of the above amendments and remarks, it is believed that claims 1, 3-10, and 12-16 are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 

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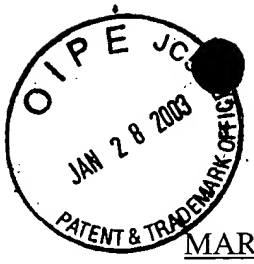

MARKED UP VERSION OF AMENDMENTS

Specification Amendments Under 37 C.F.R. § 1.121(b)(1)(iii)

Replace the paragraph at page 1, lines 10 through 21 with the below paragraph marked up by way of bracketing and underlining to show the changes relative to the previous version of the paragraph.

Generally, under the current state of technology and in the past, television has been delivered to the residential home either through radio-frequency broadcasts, satellite downlink, or over coaxial cable television (CATV) network. Data network communications, such as Internet access, have been delivered via the telephone networks through dial-up connections, ISDN (Integrated Services Digital Network), and DSL (Digital Subscriber Line) lines or over hybrid broadcast/data CATV networks, where a portion of the bandwidth transmitted by the coaxial cable is allocated for shared data network functionality using a CSMA/CD-style transmission protocol. Less commonly, data connections to the home are provided via satellite links where data are downloaded via the satellite link and uploads are handled through land lines, such as the telephone network. Another technique is to transmit data to the home via wireless, [CAMA] CDMA, for example, links.

Claim Amendments Under 37 C.F.R. § 1.121(c)(1)(ii)

1. (Amended) A system for targeting content to network devices over a data network, comprising:

a profile store that stores user profile information for network devices;

a content store for storing content; and

a system manager for downloading content from the content store to targeted network devices based on user profile information for the network devices and group profile information to which the content is targeted, the system manager sending messages to the targeted network devices among other network devices on the data network instructing system agents on the targeted network devices on when and which content to download.

10. (Amended) A method for targeting content to network devices over a data network, comprising:

storing user profile information for network devices;

collecting group profile information for content;

sending messages to targeted network devices among other devices on the data network based on the user profile information for the network devices and the group profile information for the content, the messages instructing the targeted network devices on when and which content to download; and

downloading the content [from] to the targeted network devices [based on user profile information for the network devices and the group profile information for the content].